

AMENDMENTS TO THE CLAIMS

1 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

determining whether or not there is more than one alternate communication path available; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links.

2 (previously amended): A method in accordance with claim 1, wherein the alternate communication path comprises a communication path that is not adversely affected by the one or more environmental conditions.

3 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a

vicinity of at least one of the one or more free-space optical links;

~~A method in accordance with claim 1, wherein the alternate communication path comprises more than one mode of communication.~~

4 (original): A method in accordance with claim 1, wherein the alternate communication path comprises a radio frequency (RF) communication path.

5 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

~~A method in accordance with claim 1, wherein the alternate communication path comprises a fiber optic communication path.~~

6 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical

Application No.: 09/835,866
Amendment

links; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

~~A method in accordance with claim 1, wherein the alternate communication path comprises a wire communication path.~~

7 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

~~A method in accordance with claim 1, wherein the alternate communication path comprises a free-space optical link that is not adversely affected by the one or more environmental conditions.~~

8 (previously amended): A method in accordance with claim 1, further comprising the step of:

rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to additional data obtained from monitoring one or

more environmental conditions in a vicinity of at least one of the one or more free-space optical links.

9 (previously amended): A method in accordance with claim 1, wherein the step of monitoring one or more environmental conditions comprises the step of:

collecting data indicative of at least one of the one or more environmental conditions with an instrument located in the vicinity of the at least one of the one or more free-space optical links.

10 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

wherein the step of monitoring one or more environmental conditions comprises the step of collecting data indicative of at least one of the one or more environmental conditions with an instrument located in the vicinity of the at least one of the one or more free-space optical links;

~~A method in accordance with claim 9, wherein the instrument is coupled to the free-space optical network, and wherein the step of monitoring one or more environmental conditions further comprises the step of:~~

polling the instrument from within the free-space optical network.

11 (original): A method in accordance with claim 9, wherein the step of monitoring one or more environmental conditions further comprises the step of:

storing the data indicative of at least one of the one or more environmental conditions in a memory.

12 (previously amended): A method in accordance with claim 9, wherein the step of monitoring one or more environmental conditions further comprises the step of:

comparing the data indicative of at least one of the one or more environmental conditions to a predetermined level.

13 (currently amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

wherein the step of monitoring one or more environmental conditions comprises the step of collecting data indicative of at least one of the one or more environmental conditions with an instrument located in the vicinity of the at least one of the one or more free-space optical links;

~~A method in accordance with claim 9, wherein the step of monitoring one or more environmental conditions further comprises the step of:~~

~~sending an alarm over the free-space optical network in response to the data indicative of at least one of the one or more environmental conditions.~~

14 (original): A method in accordance with claim 13, wherein the step of routing the network data traffic through an alternate communication path is performed in response to the alarm.

15 (previously amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

attempting to adjust one or both of a transmission power and receive sensitivity of one or more of the free-space optical links in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to a failure in the step of attempting to adjust.

16 (previously amended): A method in accordance with claim 15, wherein the alternate communication path comprises a communication path that is not adversely affected by the one

Application No.: 09/835,866
Amendment

or more environmental conditions.

17 (original): A method in accordance with claim 15, wherein the alternate communication path comprises more than one mode of communication.

18 (original): A method in accordance with claim 15, wherein the alternate communication path comprises a radio frequency (RF) communication path.

19 (original): A method in accordance with claim 15, wherein the alternate communication path comprises a fiber optic communication path.

20 (original): A method in accordance with claim 15, wherein the alternate communication path comprises a wire communication path.

21 (previously amended): A method in accordance with claim 15, wherein the alternate communication path comprises a free-space optical link that is not adversely affected by the one or more environmental conditions.

22 (previously amended): A method in accordance with claim 15, further comprising the step of:

rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to additional data obtained from monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links.

23 (currently amended): A system for managing a free-

space optical network, comprising:

means for monitoring one or more environmental conditions in a vicinity of at least one of one or more free-space optical links in the free-space optical network; and

means for determining whether or not there is more than one alternate communication path available; and

means for routing network data traffic through an alternate communication path in response to data obtained from the means for monitoring one or more environmental conditions in a vicinity of at least one of one or more free-space optical links in the free-space optical network.

24 (previously amended): A system in accordance with claim 23, wherein the alternate communication path comprises a communication path that is not adversely affected by the one or more environmental conditions.

25 (currently amended): A system for managing a free-space optical network, comprising:

means for monitoring one or more environmental conditions in a vicinity of at least one of one or more free-space optical links in the free-space optical network; and

means for routing network data traffic through an alternate communication path in response to data obtained from the means for monitoring one or more environmental conditions in a vicinity of at least one of one or more free-space optical links in the free-space optical network;

A system in accordance with claim 23, wherein the alternate communication path comprises more than one mode of communication.

26 (original): A system in accordance with claim 23,

wherein the means for monitoring comprises:

one or more environmental condition instruments located in the vicinity of the at least one of the one or more free-space optical links.

27 (previously amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

sending an alarm over the free-space optical network in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

routing the network data traffic through an alternate communication path in response to the alarm; and

rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to additional data obtained from monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links.

28 (original): A system in accordance with claim 27, wherein the alternate communication path comprises more than one mode of communication.

29 (previously amended): A method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

sending an alarm over the free-space optical network in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

selecting an alternate communication path for the network data traffic in response to the alarm;

routing the network data traffic through the alternate communication path;

re-evaluating the alternate communication path selection; and

rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to additional data obtained from monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links.

30 (original): A system in accordance with claim 29, wherein the alternate communication path comprises more than one mode of communication.

31 (previously added): A method in accordance with claim 1, wherein the step of routing the network data traffic through an alternate communication path further comprises the step of:

selecting the alternate communication path.

32 (previously added): A method in accordance with claim 15, wherein the step of routing the network data traffic through an alternate communication path further comprises the

Application No.: 09/835,866
Amendment

step of:

selecting the alternate communication path.

33 (previously added): A system in accordance with claim 23, wherein the means for routing the network data traffic over an alternate communication path further comprises:

means for selecting the alternate communication path.

34 (previously added): A method in accordance with claim 27, wherein the step of routing the network data traffic through an alternate communication path further comprises the step of:

selecting the alternate communication path.
